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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/813,011	03/31/2004	Hidekazu Noguchi	030712-30	5249
22204	7590	08/23/2005	EXAMINER	
NIXON PEABODY, LLP 401 9TH STREET, NW SUITE 900 WASHINGTON, DC 20004-2128			NGUYEN, HIEP	
			ART UNIT	PAPER NUMBER
			2816	

DATE MAILED: 08/23/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/813,011

Applicant(s)

NOGUCHI, HIDEKAZU

Examiner

Hiep Nguyen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 31 March 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-5, 8-10, 17 and 18 is/are allowed.
- 6) ☒ Claim(s) 6, 7, 11-16, 19 and 20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 31 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 03-31-04.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

### *Claim Rejections - 35 USC § 112*

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 6, 7, 11, 12-16, 19 and 20 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Correction and/or clarification is required.

Regarding claim 6, the recitation “a sixth transistor” is indefinite because it is not clear where it is in the drawing. The recitation “the sixth transistor weakening retention of a state of the second inverter where the state is inverted” is indefinite because it not clear how the “sixth transistor” can perform the “weakening retention” as recited. The Applicant is requested to point out what are the “sixth transistor” and the “second inverter” in the drawing.

Regarding claim 7, the recitations “a transistor” on lines 2-3, “the fifth and sixth transistors” are indefinite because it is not clear where they are in the drawing.

Regarding claim 11, the recitations “the first transistor includes a first NMOS transistor and a first PMOS transistor” on lines 2-3 and the “second transistor includes a second NMOS transistor and a second PMOS transistor” on lines 4-5 are indefinite because they are misdescriptive. A transistor cannot include two other transistors as recited.

Regarding claim 12, the recitations “the third transistor has a third NMOS transistor and a third PMOS transistor” on lines 2-3 has the same 112, 2<sup>nd</sup> problem.

Regarding claim 15, the recitation “the second inverter further includes a sixth transistor” is indefinite because it is not clear where are the “second inverter” and the “sixth transistor” in the drawing. As understood by the Examiner, the second inverter comprises second NMOS transistor (N20) and second PMOS transistor (P20). It is also unclear how “the sixth transistor” can weaken “retention of a state of the second inverter where the state is inverted”.

Regarding claim 16, the recitation “a transistor which has a current driving capacity substantially identical to the second current driving capacity and is adapted to weaken retention of a state of a connecting portion of the fifth and sixth transistors where the state

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thereof is inverted” is indefinite because it is confusing. It is not clear how the “ a transistor” is adapted to perform the weakening retention ...” function. Clear explanation is required.

Regarding claim 19, the recitation “ an input signal having a second amplitude that is smaller than the first amplitude, the input signal including a first input signal and a second input signal, the inversion circuit including a third transistor having a third current driving capacity that is smaller than the first current driving capacity and is larger than the second driving capacity” is indefinite because it is confusing. It is not clear what are the “a second amplitude” and “the first amplitude”. It is not clear what is the “ third transistor” in the drawing. The recitation “ the first amplitude” does not have antecedent basis.

Claims 13, 14 and 20 are indefinite because of the technical deficiencies of claims 12 and 19.

#### ***Allowable Subject Matter***

Claims 1-5, 8-10, 17 and 18 are allowed.

Claims 6, 7, 11, 12-16, 19 and 20 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action.

Claims 1-5, 8-10, 17 and 18 are allowed because the combination of USP. 6,084,454 and USP. 4,667,310 fails to teach or suggest a level shift circuit comprising an inversion circuit including a third transistor having a third current driving capacity that is smaller than the first current driving capacity and is larger than the second driving capacity as called for in claims 1 and 10.

Claim 19 would be allowable allowed because the combination of USP. 6,084,454 and USP. 4,667,310 fails to teach or suggest a level shift circuit comprising an inversion circuit including a third transistor having a third current driving capacity that is smaller than the first current driving capacity and is larger than the second driving capacity

#### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hiep Nguyen whose telephone number is (571) 272-1752. The examiner can normally be reached on Monday to Friday from 7:30am to 4:00pm.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Timothy Callahan can be reached on (571) 272-1740. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Hiep Nguyen

08-17-05



TUAN T. LAM  
PRIMARY EXAMINER